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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,441	06/26/2002	Atsushi Ito	221015US2PCT	9224
22850 7	7590 07/28/2004		EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C.			FUQUA, SHAWNTINA T	
1940 DUKE STREET ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER
TIBETH II (BIG)	, , , , ,		3742	

DATE MAILED: 07/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	·	Application No.	Applicant(s)				
Office Action Summary		10/070,441	ITO ET AL.				
		Examiner	Art Unit				
		Shawntina T. Fuqua	3742				
	The MAILING DATE of this communication app	pears on the cover sheet with the c	orrespondence ac	ddress			
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPL MAILING DATE OF THIS COMMUNICATION. nsions of time may be available under the provisions of 37 CFR 1.1 SIX (6) MONTHS from the mailing date of this communication. e period for reply specified above is less than thirty (30) days, a repl or period for reply is specified above, the maximum statutory period or to reply within the set or extended period for reply will, by statute reply received by the Office later than three months after the mailing	36(a). In no event, however, may a reply be timy within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered time the mailing date of this o D (35 U.S.C. § 133).				
Status	ed patent term adjustment. See 37 CFR 1.704(b).						
_	Department to communication (-) filed an C7.5	ohmioni 2004					
· · · · · · · · · · · · · · · · · · ·	Responsive to communication(s) filed on <u>27 F</u>	<u>.</u>					
<u> </u>	· ——	action is non-final.	accution on to the				
3)							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
•	ion of Claims						
	4) Claim(s) <u>1-11</u> is/are pending in the application.  4a) Of the above claim(s) is/are withdrawn from consideration.						
	5) Claim(s) is/are allowed.						
	Claim(s) <u>1-11</u> is/are rejected.						
·	Claim(s) is/are objected to.						
8)	Claim(s) are subject to restriction and/o	r election requirement.					
Applicati	ion Papers						
9) The specification is objected to by the Examiner.							
10)⊠ The drawing(s) filed on <u>26 June 2002</u> is/are: a)⊠ accepted or b)⊡ objected to by the Examiner.							
	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority ι	under 35 U.S.C. § 119						
a)l	Acknowledgment is made of a claim for foreign All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority document application from the International Bureau See the attached detailed Office action for a list	s have been received. s have been received in Application rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National	Stage			
Attachmen		A) [ ]	(DTO 442)				
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  Paper No(s)/Mail Date							
3) 🛛 Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) r No(s)/Mail Date <u>3/5/04, 3/15/04</u> .		atent Application (PT	O-152)			

#### DETAILED ACTION

## Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art in view of JP2001-244059.

Applicant discloses a ceramic heater for a semiconductor producing device comprising a ceramic substrate of nitride or carbide ceramics and a plurality resistance heating elements formed on a surface thereof via plating (specification, page 1, line 1 of the 4<sup>th</sup> paragraph-page 2, line 5 of the second paragraph). Applicant does not disclose a gutter formed along the direction of current with a depth of 20% or more of the thickness of the resistance heating element, a resistance value scattering is 5% or less, a resistance heating element with a thickness of 1 to 30 micrometers, and an area resistivity of 50 to 10 megaohms/square. JP2001-2444059 discloses a gutter (14) formed along the direction of current (abstract, Figure 10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included the gutter of JP2001-244059 in the heater disclosed by the applicant because a gutter formed along the direction of current allows the resistance value to be preset without inducing an unbalance of the heating temperature. In addition, applicant in view of JP5-258843 discloses the claimed invention except a gutter depth of 20% or more, a resistance value scattering of 5% or less, a

resistance heating element with a thickness of 1 to 30 micrometers, and an area resistivity of 50 to 10 megaohms/square. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have included a gutter depth of 20% or more, a resistance value scattering of 5% or less, a resistance heating element with a thickness of 1 to 30 micrometers, and an area resistivity of 50 to 10 megaohms/square, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art.

## Response to Arguments

3. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

#### Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shawntina T. Fuqua whose telephone number is (703) 305-2581. The examiner can normally be reached on Monday-Friday 8-4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on (703) 305-5766. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

stf July 26, 2004 Shawntina Fuqua Patent Examiner Art Unit 3742